131 FERC ¶ 61,172
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
and John R. Norris.

PJM Interconnection, L.L.C. Docket No. ER10-549-000

ORDER ACCEPTING TARIFF PROVISIONS SUBJECT TO CONDITION

(Issued May 21, 2010)

1. On December 31, 2009, PJM Interconnection, L.L.C. (PJM), in accordance with Schedule 12 of the PJM Open Access Transmission Tariff (OATT or Tariff) and section 1.6 of Schedule 6 of the PJM Operating Agreement, filed amendments to reflect the assignments of cost responsibility for 34 new baseline upgrades included in the most recent update to the Regional Transmission Expansion Plan (RTEP) approved by the PJM Board of Managers (PJM Board) (December 31, 2009 RTEP Filing).[1] In this order, we accept all of PJM's tariff sheets to become effective March 31, 2010 with the exception of the Eighth Revised Sheet, No. 270F.02, which is conditionally accepted subject to a compliance filing.

I. Background

2. PJM filed cost responsibility assignments for transmission upgrades that were approved by the PJM Board as part of PJM's RTEP, in accordance with Schedule 12 of the Tariff and Schedule 6 of the PJM Operating Agreement, and pursuant to section 205 of the Federal Power Act.[2] The RTEP provides for the construction of expansions and upgrades to PJM's transmission system in order to comply with reliability criteria, and to maintain and enhance the economic and operational efficiency of PJM's wholesale electricity markets.

[1] The PJM Board approved the baseline upgrades in this proceeding on December 14, 2009. PJM states that with these approvals, the PJM Board has authorized a total of more than $15.1 billion in investment since 2000.

[2] 16 U.S.C. § 824d (2006).

3. Pursuant to Schedule 12, the costs of new RTEP facilities that operate at or above 500 kV (Regional Facilities), as well as lower voltage facilities that must be constructed or strengthened to support new Regional Facilities (Necessary Lower Voltage Facilities), are allocated on a region-wide basis (postage-stamp allocation).[3] The costs of new RTEP facilities that operate below 500 kV and are not Necessary Lower Voltage Facilities are allocated based on a "beneficiary pays" approach using a distribution factor (DFAX) methodology.[4]

II. PJM's Filing

4. The December 31, 2009 RTEP Filing includes cost responsibility assignment for 34 baseline upgrades that will operate below 500 kV and are not Necessary Lower Voltage Facilities. PJM requests that the revised tariff sheets become effective on March 31, 2010.

5. PJM states that the DFAX methodology takes into account the contributions of load to the reliability criteria violations for which Lower Voltage Facilities are identified as solutions in the RTEP.[5] More specifically, to determine cost responsibility under the DFAX methodology, PJM, based on a computer model of the electric network and using power flow modeling software, calculates distribution factors, represented as decimal values or percentages, which express the portions of a transfer of energy from a defined source to a defined sink that will flow across a particular transmission facility or group of transmission facilities. These distribution factors represent a measure of the effect of the load of each transmission zone or merchant transmission facility on the transmission constraint that requires the Lower Voltage Facility, as determined by a power flow analysis. For some of the Lower Voltage Facilities, the reliability criteria violation was

[3] Tariff, Schedule 12, section (b)(i); s*ee PJM Interconnection, L.L.C.*, Opinion No. 494, 119 FERC ¶ 61,063 (2007), *order on reh'g and compliance filing*, Opinion No. 494-A, 122 FERC ¶ 61,082 (2008), *order denying reh'g*, 124 FERC ¶ 61,033 (2008). On August 6, 2009, the United States Court of Appeals for the Seventh Circuit (Seventh Circuit Court) granted a petition for review regarding the use of a postage-stamp cost allocation methodology for new transmission facilities that operate at or above 500 kV, and remanded the case to the Commission for further proceedings. *Illinois Commerce Commission v. FERC*, 576 F.3d 470 (7th Cir. 2009).

[4] The Commission accepted a settlement submitted by PJM that set forth the details of the beneficiary pays methodology in Schedule 12, section (b)(ii). *PJM Interconnection, L.L.C.*, 124 FERC ¶ 61,112 (2008).

[5] PJM Tariff Schedule 12, section (b)(iii)(C).

driven by load entirely within a single zone, which, therefore, received the cost responsibility assignment. For such upgrades, the DFAX calculation would be based on an interface entirely within a single zone, resulting in an allocation of 100 percent to that zone.

III. Notice and Interventions

6. Notice of PJM's filing was published in the *Federal Register*, 75 Fed. Reg. 2532 (2010), with interventions and protests due on or before February 1, 2010. Notices of intervention were filed by Illinois Commerce Commission and the Maryland Public Service Commission. Motions to intervene were filed by Pepco Holdings, Inc., Old Dominion Electric Cooperative, Exelon Corporation, and North Carolina Electric Membership Corporation. Duke Energy Corporation and the Office of the Ohio Consumers' Counsel filed an out of time motions to intervene. A motion to intervene and limited protest was filed by Dayton Power and Light Company (Dayton).

IV. Protest

7. Dayton protests that the PJM load forecasts used in this RTEP study were finalized prior to updates that have been made to the Dayton zone load forecast which reflect significant and recent load reductions due to the recession and loss of certain large industrial customer operations in the Dayton zone. Dayton is concerned that upgrades in its zone may not be needed due to the downwardly revised load forecast for its zone. Dayton also states that certain of the proposed upgrades appear to have been included due to double-contingency analysis that is inappropriately applied to facilities that are not Bulk Electric System facilities as defined by Reliability First Corporation, for example, transformers with a low-voltage side operating at 69 kV. Dayton states that baseline upgrades b1065.1, b1065.2, b1065.3, and b1067 involve a double contingency analysis with one of the contingencies including the loss of one or more 138/69 kV transformers. Dayton further states that it believes that PJM agrees that these baseline upgrades should be removed from the list of proposed projects.

V. Deficiency Letter, Answer and Reply

8. On February 25, 2010, a deficiency letter was issued to PJM seeking additional information, and PJM filed an answer on March 22, 2010.[6] PJM states that the downward change in the Dayton load forecast from 2009 RTEP to 2010 RTEP is 2

[6] Notice of PJM's response the February 25, 2010 deficiency letter was published in the *Federal Register*, 75 Fed. Reg. 16784 (2010), with comments due on or before April 12, 2010.

percent, and this reduction is primarily due to a more pessimistic forecast of economic growth in the Dayton zone. PJM states its economic forecast is provided by Moody's Economy.com. PJM states that the upgrades in question (b1065.1, b1065.2, b1065.3, and b1067) were presented to and reviewed by the Transmission Expansion Advisory Committee (TEAC) on October 22, 2009 based on the then currently available 2009 Load Forecast Report. PJM states that the change in load forecast will be reevaluated in the context of the 2010 RTEP, the results of which will be reviewed with the PJM TEAC and presented to the PJM Board for approval during 2010. PJM believes that since these upgrades are identified as not needed until 2014, the reevaluation will determine if the upgrades are no longer needed and thus can be removed in a timely manner with no risk to Dayton.

9. PJM further states that the contingencies identified for baseline upgrades b1065.1, b1065.2, b1065.3 and bl067 are fully consistent with the PJM RTEP process. PJM states that the contingencies it uses as part of the RTEP process include the operation of planned protection systems that affect the Bulk Electric System. PJM states that the subject upgrades are required to address violations of North American Electric Reliability Corporation (NERC) Reliability Standards TPL-003 on the Bulk Electric System; specifically, the violations are NERC Category C3 contingency events which simulate a single contingency followed by manual system adjustments followed by another single contingency (N-1-1). Therefore, PJM does not agree that baseline upgrades b1065.1, b1065.2, b1065.3 and bl067 should be removed from the RTEP at this time.

10. In response to PJM's March 22, 2010 answer to staff's deficiency letter, Dayton filed reply comments. Dayton states in its reply comments that the only reason that the 2010 revised forecast appears to be within 2 percent of the 2009 forecast is that PJM and presumably Moody's are not capturing "facts on the ground" and instead are applying unrealistically high growth rates to the Dayton zone. Dayton states that between 2007 and 2009, Dayton's actual peak dropped by over 10 percent from 3,727 MW to 3,327 MW, and much of this load is permanently lost and reflects closings of factories previously operated by General Motors and Delphi Corporation, the loss of the national hub delivery point for DHL Express, and the loss of load from several other companies that have left the Dayton region. Dayton believes that PJM and/or Moody's is applying unrealistic annual growth rates, including a value of 4.3 percent between 2011 and 2012. Dayton believes that a more realistic annual growth rate would be in the range of 1 percent or less. Dayton also states that the State of Ohio has mandated an aggressive energy efficiency and demand response initiative, with which Dayton fully plans to comply, which will further lower its demand forecast below the current projections

11. Dayton states that after reviewing PJM Manual 14B, it is unable to reach the same conclusion as PJM that the contingencies identified for baseline upgrades b1065.1, b1065.2, b1065.3 and bl067 are fully consistent with the PJM RTEP process. Dayton points to page 20 of PJM's Manual 14B under the heading Baseline Voltage Analysis

which states that "[b]aseline voltage analysis does not examine category C or common mode outages." Dayton believes that while voltage level analyses are prepared in analyzing violations that may occur under category A (no contingency) and category B (single contingency), such analyses are not applied for category C events, and PJM's comments stated that the events at issue here are NERC Category C3 Contingency events (N-1-1). Dayton refers to PJM's Manual 14B, Attachment D.1 and states that Dayton, as a Transmission Owner, files FERC Form 715 and for each of these lower voltage transformers has identified them as single contingency only facilities. Therefore, Dayton contends that PJM is not following this aspect of the RTEP process by applying a NERC Category C3 contingency analysis.

VI. Discussion

A. Procedural Matters

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,[7] the notices of intervention and timely, unopposed motions to intervene serve to make them parties to this proceeding.

13. Pursuant to Rule 214(d),[8] the Commission will grant Duke Energy Corporation's and Office of the Ohio Consumers' Counsel's untimely motions to intervene given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

B. Commission Determination

14. We will accept all of PJM's tariff sheets with the exception of the Eighth Revised Sheet, No. 270F.02, which is conditionally accepted subject to a compliance filing. Dayton contends first that updates to the Dayton zone load forecast which reflect significant and recent load reductions in the Dayton zone have not been incorporated in the RTEP forecast. As a result, Dayton recommends that PJM review all of the identified upgrades in the Dayton zone to determine if they are still needed. We find PJM's inclusion of these projects appropriate under its tariff because these projects were included based on the current forecast available to PJM in the preparation of its 2009 RTEP. Under the tariff, changes in conditions will be evaluated within the context of its 2010 RTEP. PJM states that it annually verifies the continued need for or modification of past recommended upgrades through its planning analysis, which is called retool analysis.

[7] 18 C.F.R. § 385.214 (2009).

[8] 18 C.F.R. § 385.214(d) (2009).

In its retool analysis, PJM updates previous studies with new information about assumptions, such as load forecast assumptions, that go into the original study, and the results of this retool analysis are incorporated into the RTEP. PJM's reevaluation of its load forecast will serve to protect Dayton in the event that the 2010 RTEP demonstrates that these projects are no longer needed.

15. With regard to transformers with a low-voltage side operating at 69 kV, PJM states the contingencies PJM uses as part of the RTEP process include the operation of planned protection systems that affect the Bulk Electric System. PJM's "2009 RTEP Assumptions"[9] state that contingency analysis will include all lower voltage facilities operated by PJM. Therefore, PJM has appropriately applied its contingency analysis with regard to the transformers.

16. Dayton maintains that PJM has improperly included baseline upgrades b1065.1, b1065.2, b1065.3 and bl067 as reliability projects. In its answer to the deficiency letter, PJM asserts that these upgrades were necessary due to a "low voltage magnitude violation" and a "voltage drop violation" as a result of a category C analysis, but Dayton maintains that under PJM's Manual 14B voltage violations are not assessed using category C.

17. PJM's Tariff requires PJM to address reliability violations identified through the RTEP process.[10] According to PJM Manual 14B at Attachment D, the PJM Reliability Planning Criteria consist of multiple standards and applicable planning principles that include PJM planning procedures, NERC Planning Standards, NERC Regional Council planning criteria, and the individual Transmission Owner FERC filed planning criteria. PJM states that the subject upgrades are required to address violations of NERC Reliability Standards TPL-003 on the Bulk Electric System; specifically, the violations are NERC Category C3 contingency events. However, as relevant here, PJM's Manual 14B at Section 2.3.6 states that "[b]aseline voltage analysis does not examine category C or common mode outages."

18. PJM claims these projects were required due to low voltage under category C analysis, and its Manual 14B does not include category C analysis for baseline voltage analysis, PJM has not adequately supported the inclusion of these projects based on its tariff and operating manuals. We therefore direct PJM to make a compliance filing explaining why its analysis for baseline upgrades b1065.1, b1065.2, b1065.3 and bl067 is

[9] http://www.pjm.com/~/media/committees-groups/committees/srrtep-ma/2009-rtep-assumptions.ashx

[10] PJM Tariff, Schedule 6.

consistent with its tariff and operating manuals. If on compliance PJM fails to make the satisfactory showing, in the order on compliance, the Commission will direct PJM to remove these upgrades from the tariff.

The Commission orders:

(A) PJM's revised tariff sheets for new RTEP transmission facilities that will operate below 500 kV and are not Necessary Lower Voltage Facilities are hereby accepted for filing to become effective on March 31, 2010 with the exception of the Eighth Revised Sheet No. 270F.02.

(B) PJM's Eighth Revised Sheet No. 270F.02 is hereby conditionally accepted for filing to become effective on March 31, 2010 subject to compliance filing.

(C) PJM is hereby directed to submit a compliance filing within thirty (30) days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.